

Appl. No. U.S. Patent Application No. 09/889,628
Docket No. CM1993M
Amdt. Dated August 21, 2003
Reply to Office Action of May 21, 2003

~~a) a polymeric disintegrant having a particle size distribution such that at least 90 % by weight thereof has a particle size below about 0.3mm and at least 30 % by weight thereof has a particle size below about 0.2mm; and~~

~~b) a water-soluble hydrated salt having a solubility in distilled water of at least about 25g/100g at 25°C.~~

A detergent tablet for use in a washing machine, the tablet having two or more phases at least one of which comprises one or more of the following:

a) a polymeric disintegrant having a particle size distribution such that at least 90 % by weight thereof has a particle size below about 0.3mm and at least 30 % by weight thereof has a particle size below about 0.2mm; or

b) a water-soluble hydrated salt having a solubility in distilled water of at least about 25g/100g at 25°C.

wherein said detergent tablet comprises:

i) a first phase in the form of a shaped body having at least one mould therein; and

ii) a second phase is in the form of a compressed particulate solid adhesively attached within said mould.

16. (previously presented) A detergent tablet according to claim 1 wherein the polymeric disintegrant has a particle size distribution such that at least 90 % by weight thereof has a particle size below about 0.25mm and at least 50 % by weight thereof has a particle size below about 0.2mm.

17. (previously presented) A detergent tablet according to claim 1 wherein the polymeric disintegrant has a particle size distribution such that at least 90 % by weight thereof has a particle size above about 0.05mm.

18. (previously presented) A detergent tablet according to claim 17 wherein the polymeric disintegrant has a particle size distribution such that at least 90 % by weight thereof has a particle size above about 0.075mm.

19. (previously presented) A detergent tablet according to claim 1 wherein the polymeric disintegrant is selected from starch, cellulose and derivatives thereof, alginates, sugars, polyvinylpyrrolidones and mixtures thereof.

20. (previously presented) A detergent tablet according to claim 1 wherein the water-soluble hydrated salt is selected from hydrates of sodium acetate, sodium metaborate, sodium

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orthophosphate, sodium dihydrogenphosphate, disodium hydrogen phosphate, sodium potassium tartrate, potassium aluminium sulphate, calcium bromide, calcium nitrate, sodium citrate, potassium citrate and mixtures thereof.

21. (previously presented) A detergent tablet according to claim 1 wherein the water-soluble hydrated salt is selected from water-soluble mono-, di- tri- and tetrahydrate salts and mixtures thereof.

22. (previously presented) A detergent tablet according to claim 1 wherein the water-soluble hydrated salt has a melting point in the range from about 30°C to about 95°C.

23. (previously presented) A detergent tablet according to claim 22 wherein the water-soluble hydrated salt has a melting point in the range from about 30°C to about 75°C.

24. (previously presented) A detergent tablet according to claim 1 containing from about 0.5% to about 10% by weight each of the polymeric disintegrant and water-soluble hydrated salt.

25. (previously presented) A detergent tablet according to claim 1 having a child bite strength (CBS) of at least about 6 kg.

26. (previously presented) A detergent tablet according to claim 25 having a child bite strength (CBS) of greater than about 14 kg.

27. (previously presented) A detergent tablet according to claim 1 wherein the particulate solid is compressed at a pressure of at least about 40 kg/cm².

28. (previously presented) A detergent tablet according to claim 27 wherein the particulate solid is compressed at a pressure of at least about 250 kg/cm².

29. (previously presented) A detergent tablet according to claim 28 wherein the particulate solid is compressed at a pressure of at least about 350 kg/cm².

30. (cancelled)

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31. (currently amended) A detergent tablet according to claim ~~30~~ 1 wherein the second phase is compressed at a pressure of less than about 350 kg/cm².

32. (currently amended) A detergent tablet according to claim ~~30~~ 1 wherein the first phase is compressed at a pressure of at least about 350 kg/cm².